UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,992	06/23/2003	Ludmila Cherkasova	200311046-1	9816

7590 04/12/2010

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
BHATIA, AJAY M	
ART UNIT	PAPER NUMBER
2445	

MAIL DATE	DELIVERY MODE
04/12/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LUDMILA CHERKASOVA and WENTING TANG

Appeal 2009-002076[1]
Application 10/601,992
Technology Center 2400

Decided: April 12, 2010

Before JOHN A. JEFFERY, THU A. DANG, and STEPHEN C. SIU, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

---

[1] This appeal is related to another appeal in connection with Application 10/601,357 (Appeal No. 2009-005930). Neither Appellants nor the Examiner, however, refer to that related appeal here. *See* Br. 2, 49 (Rel. Proc. App'x); *see also* Ans. 2 mailed Oct. 2, 2007 (noting the Examiner's unawareness of any related appeals). Nevertheless, the present appeal was referred to in connection with the appeal for the '357 application. *See* Appl'n 10/601,357 App. Br. filed Sept. 28, 2007, at 2, 42 (Rel. Proc. App'x).

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-11, 13-17, and 19-42. We have jurisdiction under 35 U.S.C. § 6(b). We affirm-in-part.

STATEMENT OF THE CASE

Appellants' invention manages admission of requests to a shared media server with multiple hosting services such that they use shared resources (e.g., memory) in a desired manner. In one implementation, a "segment-based memory model" is used to determine if a requested streaming file is in memory. *See generally* Abstract; Spec. ¶¶ [0002], [0009-0014]. Claims 1 and 2 are illustrative with key disputed limitations emphasized:

1. A method for managing admission of requests to a streaming media server, the method comprising:

receiving a new request for a streaming media file to be served by a streaming media server;

performing a resource availability check for the streaming media server to determine whether the streaming media server has sufficient available resources to service the new request; and

performing a quality of service guarantee check for the streaming media server to determine whether *acceptance of the new request will violate, at any point in the future, a desired quality of service provided by the streaming media server for any previously accepted requests.*

2. The method of claim 1 wherein said resource availability check comprises:

using a *segment-based memory model* to determine whether at least a portion of the requested streaming media file is in the streaming media server's memory.

The Examiner relies on the following as evidence of unpatentability:

Ueno	US 5,991,811	Nov. 23, 1999
Krishnamurthy	US 6,910,024 B2	June 21, 2005 (filed Feb. 5, 2001)

THE REJECTIONS

1. The Examiner rejected claims 29-36 under 35 U.S.C. § 101 as directed to non-statutory subject matter. Ans. 3-6.[2]
2. The Examiner rejected claims 1, 2, 6-8, 23-25, 29-33, and 37-39 under 35 U.S.C. § 102(b) as anticipated by Ueno. Ans. 6-11.
3. The Examiner rejected claims 3-5, 9-11, 13-17, 19-22, 26-28, 34-36, and 40-42[3] under 35 U.S.C. § 103(a) as unpatentable over Ueno and Krishnamurthy. Ans. 12-19.

---

[2] Throughout this opinion, we refer to the Appeal Brief filed July 19, 2007 and the Examiner's Answer mailed October 2, 2007.

[3] Although the Examiner omits claims 34, 41, and 42 in the statement of the rejection, the Examiner nonetheless includes them in the body of the rejection. *Compare* Ans. 12 *with* 17-19. We therefore presume that the Examiner intended to include claims 34, 41, and 42 in this rejection. *Accord* Br. 9 (including claims 41 and 42 in the obviousness rejection in the grounds

CLAIM GROUPING

Although Appellants argue various claim groupings separately regarding the anticipation rejection (Br. 12-24), for the reasons indicated in the opinion, we group the claims as follows: (1) claims 1 and 6-8, and (2) claims 2, 23-25, 29-33, and 37-39. We select claim 1 as representative of group (1). *See* 37 C.F.R. § 41.37(c)(1)(vii).

Regarding the obviousness rejection, Appellants likewise argue various claim groupings separately. Br. 24-38. For the reasons indicated in the opinion, however, we group the claims as follows: (1) claims 3, 11, 13-17, 19-22, 26-28, 34-36, 40, and 42; (2) claims 4 and 9; (3) claim 5; (4) claim 10; and (5) claim 41. We select claim 4 as representative of group (2). *See* 37 C.F.R. § 41.37(c)(1)(vii).

THE § 101 REJECTION

The Examiner finds that the software code of claims 29-36 is not implemented on a computer-readable storage medium, and refers to Appellants' Specification which indicates that the software of the present invention can be communicated via a data signal. Ans. 3-6.

Appellants argue that the claims recite statutory subject matter since the recited software code is functional and *stored to* a computer-readable medium. Br. 11-12.

---

of rejection section of the Brief); Ans. 2 (confirming this statement as correct).

The issue before us, then, is as follows:

ISSUE

Has the Examiner erred in rejecting claims 29-36 by finding that the software code stored to a computer-readable medium is non-statutory subject matter under § 101?

FINDINGS OF FACT (FF)

1. According to Appellants' Specification:

> The executable instructions or software code may be obtained from a readable medium (e.g., a hard drive media, optical media, EPROM, EEPROM, tape media, cartridge media, flash memory, ROM, memory stick, and/or the like) or communicated via a data signal from a communication medium (e.g., the Internet). In fact, readable media can include any medium that can store or transfer information.

Spec. ¶ [0157].

PRINCIPLES OF LAW

Signals are unpatentable under § 101. *In re Nuijten*, 500 F.3d 1346, 1355 (Fed. Cir. 2007). According to U.S. Patent & Trademark Office (USPTO) guidelines:

> A claim that covers both statutory and non-statutory embodiments . . . embraces subject matter that is not eligible for patent protection and therefore is directed to non-statutory subject matter. . . . For example, a claim to a computer readable

> medium that can be a compact disc or *a carrier wave* covers a non-statutory embodiment and therefore should be rejected under § 101 as being directed to non-statutory subject matter.

U.S. Patent & Trademark Office, *Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101*, Aug. 2009, at 2, *available at* http://www.uspto.gov/web/offices/pac/dapp/opla/2009-08-25_interim_101_instructions.pdf (emphasis in original) ("Interim Instructions").

ANALYSIS

We will sustain the Examiner's rejection of claims 29-36 under § 101. Although the software code is *stored to* a computer-readable medium in these claims, that alone is not dispositive, for the computer-readable medium itself embraces non-statutory subject matter (e.g., signals) as evidenced by Appellants' Specification. *See* FF 1 (noting that the disclosed software code can be *communicated via a data signal from a communication medium*) (emphasis added).

Signals, however, are unpatentable under § 101. *Nuijten*, 500 F.3d at 1355. Where, as here, claims encompass both statutory and non-statutory embodiments, they are non-statutory under § 101. Interim Instructions, at 2. That Appellants indicate that the readable media of the present invention "can include *any* medium that can store or transfer information" (FF 1; emphasis added) only bolsters this conclusion.

Although Appellants contend that the language of claims 29-36 is directed to a "well-accepted type of claim" and cite *In re Beauregard*, 53

F.3d 1583 (Fed. Cir. 1995) to support this contention (Br. 10), the court did not so decide in that case. Rather, the court merely indicated that the Commissioner agreed that the printed matter doctrine was inapplicable under the specific facts of that case, and therefore no case or controversy existed. *Id.* at 1584. Appellants' reliance on *Beauregard* is therefore unavailing.

We therefore find no error in the Examiner's rejection of claims 29-36 under § 101.

THE ANTICIPATION REJECTION

Regarding representative claim 1, the Examiner finds that Ueno discloses every recited feature including performing a quality of service guarantee check to determine if accepting a new request will violate, at any point in the future, a desired quality of service provided by the server for any previously-accepted requests. Ans. 6, 7, 21.

Appellants disagree that Ueno performs the recited quality of service guarantee check since Ueno does not allegedly evaluate if accepting a new request will violate a desired quality of service *for any previously-accepted requests*. Br. 12-17 (emphasis in original). According to Appellants, Ueno merely analyzes whether to accept a new request without considering the impact of such an acceptance on previously-accepted requests. *Id.*

Regarding claim 2, Appellants argue that Ueno fails to teach any model of a media server's memory, let alone a "segment-based memory model" as claimed. Br. 18-19. The Examiner, however, finds that given the

"broadest *possible* interpretation" of the term, Ueno's video division and streaming technique constitutes a "segment-based memory model" as claimed. Ans. 21-22; emphasis added.

The issues before us, then, are as follows:

ISSUES

Under § 102, has the Examiner erred by finding that Ueno:

(1) performs a "quality of service guarantee check" to determine if accepting a new request will violate, at any point in the future, a desired quality of service provided by the server for any previously-accepted requests as recited in claim 1?

(2) uses a "segment-based memory model" to determine if at least part of the requested streaming file is in the media server's memory as recited in claim 2?

ADDITIONAL FINDINGS OF FACT

2. Ueno's system transmits requested information (e.g., a video on demand (VOD)) using transfer mode classes of "guaranteed quality" (e.g., "constant bit rate" (CBR)) for real-time data, and "best effort" classes (e.g., "available bit rate" (ABR)) for non-real-time information. Ueno, col. 1, ll. 40-67; col. 7, l. 60 – col. 8, l. 40.

3. In one embodiment, real-time data is transmitted via a single line 713 which offers the ABR service class. In the ABR, parameters such as a

guaranteed minimum transmission rate ("MinR") and a peak rate ("PeakR") are reported to establish communication. Ueno, col. 16, ll. 49-55; Fig. 7.

4. "[I]f there is room in bands after ensuring at least the bands of the MinR, the transmission rate up to the PeakR is able to be obtained." And if the real-time transmission rate (Rr) is less than or equal to MinR, data arriving at the receiving side is not delayed from the required time. Data is therefore read out from FIFO 707 at the rate of Rr for input to decoder 712. Ueno, col. 16, ll. 49-66; Fig. 7.

5. Figure 10 shows a VOD system with servers 1001, 1005, 1006 that store video sources for transmission to users' set-top units (STUs) 1010-13 via channels. Ueno, col. 18, ll. 18-35; Fig. 10.

6. Ueno notes the following in connection with the embodiment of Figure 10:

> Since there are upper limits with respect to the number of simultaneous accesses to the same video source and the number of users to which services are able to be offered at the same time for each server, a new demand for service is not able to be accepted when they have already reached the upper limits.

Ueno, col. 18, ll. 35-40; Fig. 10.

7. Appellants refer to Paragraphs [0031] through [0034] and [0052] through [0097] of the Specification of the present application in connection with using a segment-based memory model recited in claim 2. Br. 4.

8. According to Appellants' Specification, "the current memory state of a media server at any given time may be determined through a memory

state model. Such modeling of the media server's memory state provides a close approximation of the real system memory but reflects a higher-level memory abstraction." Spec. ¶ [0029].

9. According to Appellants' Specification:

> Certain embodiments of the present invention utilize a segment-based access model for representing unique, most recently accessed segments of a file. Such a segment-based access model may be used for efficiently computing a media server's memory state . . . . [C]onsidering that a streaming file may be concurrently accessed (or have overlapping accesses thereto), various portions (or segments) of the streaming media file may have different time stamps at which they have been most recently accessed by a client.

Spec. ¶ [0031].

10. The Specification provides an example of a segment-based access model that represents (1) a segment (0-40 seconds) of a file that was most recently accessed at time t=10 seconds, and (2) a segment (40-50 seconds) of the file that was most recently accessed at time t=40 seconds. Spec. ¶ [0032]. *See also id.* ¶¶ [0053-0081] (detailing determining a segment-based access model of streaming media files).

11. By computing the memory state from the segment-based access model, a segment-based model of the media server's memory results. Unlike a "real" memory organization, a segment-based memory model enables efficiently determining content of such memory over time (e.g., determining file segments that are evicted from memory in favor of inserting

new file segments into memory, etc.). Spec. ¶ [0033]. *See also id.* ¶¶ [0082-0096] (detailing computing a media server's memory state from a segment-based access model).

12. By determining which segments of a requested file are stored in memory (e.g., whether the prefix of a requested file is available in memory), the system can estimate memory consumption versus disk resources needed to service a requested file. Spec. ¶ [0052].

13. Ueno notes that an information source can be divided into a number of parts to facilitate transmission. Ueno, col. 11, ll. 10-27.

PRINCIPLES OF LAW

"[T]he specification is the single best guide to the meaning of a disputed term, and . . . acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." *Phillips v. AWH Corp.,* 415 F.3d 1303, 1321 (Fed. Cir. 2005) (en banc) (internal quotation marks and citations omitted); *see also id.* ("Even when guidance is not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.") (citations and internal quotation marks omitted).

During patent examination, claims are given their broadest reasonable interpretation in light of the Specification as it would be interpreted by skilled artisans. *Id.* at 1316 (citations omitted).

ANALYSIS

Claims 1 and 6-8

The dispute before us hinges on whether Ueno performs a "quality of service guarantee check" to determine if accepting a new request will violate, at any point in the future, a desired quality of service provided by the server *for any previously-accepted requests*. Based on the record before us, we find no error in the Examiner's reliance on Ueno in this regard.

The Examiner's position is based on Ueno's bandwidth allocation functions in connection with video streaming. Ans. 21. In this regard, the Examiner takes the position that when a new video begins to stream, its quality of service is dictated by its (1) minimum transmission rate, and (2) peak rate which is reached at some future time. *Id.* The Examiner reasons that since Ueno's system allocates guaranteed bandwidth to previously-requested videos (presumably including the "new video" noted above that has just begun to stream), bandwidth would therefore be unavailable to service new requests. *Id.*

Although the Examiner's cited passage from Ueno refers to using these transmission rates in connection with the rate that data is read out from a FIFO at the receiving end (FF 4) as Appellants argue (Br. 16), we nonetheless agree with the Examiner that Ueno accounts for bandwidth in determining whether accepting new requests will violate a desired quality of service for previously-accepted requests.

Ueno expressly states that "if there is *room in bands* after ensuring at least the bands of the MinR [sic], the transmission rate up to the PeakR is able to be obtained." FF 4; emphasis added. Although Ueno does clearly tie this "room in bands" (i.e., bandwidth) to the impact that accepting new requests would have on previously-accepted requests in this passage, Ueno nevertheless emphasizes that bandwidth is a key factor in determining whether to accept new requests.

Ueno notes that, in connection with the embodiment of Figure 10, there are *upper limits* regarding the number of (1) simultaneous accesses to the same video source, and (2) users to which services can be offered simultaneously for each server. FF 6. Based on these constraints, Ueno then concludes that "a *new demand* for service is not able to be *accepted* when *they* have already reached the upper limits." *Id.* (emphases added).

Ueno's word choice here is telling: the term "they" in this context refers to the *simultaneous accesses and users to which services are offered* referred to in connection with the "upper limits" discussed in the same sentence. *See* FF 6. Simply put, these simultaneous accesses and users to which services are offered represent previously-accepted requests for service.

By determining that the system is unable to accept new demands (i.e., requests) for service when these upper limits are reached (i.e., due to these simultaneous accesses and users), it follows that this determination would likewise indicate that accepting these new requests under this condition

would violate a desired present or future quality of service in terms of available bandwidth for at least those previously-accepted requests.

We are therefore not persuaded that the Examiner erred in rejecting representative claim 1, and claims 6-8 which fall with claim 1.

Claims 2, 23-25, 29-33, and 37-39

We will not, however, sustain the Examiner's rejection of claim 2 which calls for, in pertinent part, a "segment-based memory model."

We begin by construing a "segment-based memory model." To this end, we refer to Appellants' Specification for it is the single best guide to claim construction. *Phillips,* 415 F.3d at 1321. Although Appellants' Specification does not explicitly define the term "segment-based memory model," it nevertheless extensively discusses this model, its mathematical basis, and its application to streaming files (*see* FF 7-12)—an explanation that informs our construction and at least implicitly defines the term. *See Phillips,* 415 F.3d at 1321.

As the Specification indicates, modeling the media server's memory state in a segment-based fashion closely approximates real system memory, but reflects a "higher-level memory abstraction." FF 8. And this "memory abstraction" enables efficiently determining content of this memory over time (e.g., determining file segments that are evicted from memory in favor of inserting new file segments into memory, etc.). FF 11. With this

"abstraction," the system can estimate memory consumption versus disk resources needed to service a requested file. FF 12.

To this end, a "segment-based *access* model" is determined to uniquely represent the most recently accessed segments of a streaming file. FF 9-10. This "access model" is then used as a basis for deriving the "segment-based *memory* model." FF 11.

Based on these descriptions, we therefore construe a "segment-based memory model" as a high-level abstraction that (1) represents real system memory to enable efficiently determining content of this memory over time on a segment-by-segment basis, and (2) is derived from a segment-based access model that uniquely represents the most recently accessed segments of a streaming file.

With this construction, we find the Examiner's reliance on Ueno's video division and streaming technique as allegedly constituting a "segment-based memory model" under the term's "broadest *possible* interpretation" (Ans. 21-22; emphasis added) problematic.

First, the Examiner incorrectly states the claim construction standard used during patent prosecution. This standard is not the broadest *possible* interpretation as the Examiner posits: rather, it is the broadest *reasonable* interpretation in light of the Specification as it would be interpreted by skilled artisans. *Phillips*, 415 F.3d at 1316.

Second, even if the Examiner did apply the correct standard in construing claim 2, Ueno still falls well short of disclosing a segment-based

memory model as claimed. Although Ueno notes that an information source can be divided into various parts to facilitate transmission as the Examiner indicates (Ans. 22; FF 13), merely referring to this division hardly explains how or why this division constitutes a memory *model*, let alone a segment-based memory model as construed in light of the Specification.

This shortcoming is particularly acute given the unique functionality of the recited "segment-based memory model" noted above—an abstraction that efficiently determines content of this memory over time on a segment-by-segment basis. FF 11. That is, from the record before us, we cannot say—nor has the Examiner shown—that this video division (or any other functionality in Ueno) necessarily constitutes a high-level abstraction that (1) represents real system memory to enable efficiently determining content of this memory over time on a segment-by-segment basis, and (2) is derived from a segment-based access model that uniquely represents the most recently accessed segments of a streaming file. To hold otherwise would require us to resort to speculation. That we will not do. Nor will we engage in such an inquiry in the first instance on appeal.

We therefore conclude that the Examiner erred in rejecting claim 2, and claims 23-25, 29-33, and 37-39 which recite commensurate limitations.

THE OBVIOUSNESS REJECTION

Regarding claims 4 and 5, the Examiner finds that Ueno and Krishnamurthy collectively determine a cost associated with serving a

requested media file, and that Ueno serves at least a portion of the media from memory. Ans. 13, 24. Appellants argue, however, that the various cited portions of the references fail to teach determining a cost of serving the requested media file from memory or disk as recited in claim 5. Br. 26-28.

Regarding claim 41, Appellants argue that the cited prior art does not teach or suggest performing the quality of service guarantee check even when the resource availability check determines that the streaming media server has sufficient available resources to service a new request. Br. 37.

The issues before us, then, are as follows:

ISSUES

Under § 103, has the Examiner erred by finding that Ueno and Krishnamurthy collectively would have taught or suggested:

(1) determining a cost associated with serving the requested streaming media file from the streaming media server from memory or disk as recited in claim 5?

(2) performing the quality of service guarantee check even when the resource availability check determines that the streaming media server has sufficient available resources to service a new request as recited in claim 41?

ADDITIONAL FINDINGS OF FACT

14. Krishnamurthy's system pertains to pricing-based quality of service control in networks. Specifically, network resources are monitored

and configured to provide various quality of service levels that guarantee a particular combination of network resources and service price. Krishnamurthy, col. 1, ll. 13-15; col. 2, ll. 43-56; col. 5, ll. 38-51; Fig. 1.

15. Ueno's Figure 7 includes a storage unit 701 in server 700. Ueno, Fig. 7.

16. Ueno's Figure 2 includes a server 200 with a storage unit 201 with ports 201a, 201b for outputting a video source. Ueno, col. 9, ll. 35-39; Fig. 2.

PRINCIPLES OF LAW

To be patentable under § 103, an improvement must be more than the predictable use of prior art elements according to their established functions. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

ANALYSIS

Claims 3, 11, 13-17, 19-22, 26-28, 34-36, 40, and 42

For the reasons indicated above, we will not sustain the Examiner's rejection of claims 3, 11, and 17 which call for, in pertinent part, a segment-based memory model. Nor has the Examiner shown that the cited Krishnamurthy reference cures this deficiency. We likewise reverse the Examiner's rejection of dependent claims 13-16, 19-22, 26-28, 34-36, 40, and 42 for similar reasons.

Claims 4 and 9

We will, however, sustain the Examiner's rejection of representative claim 4. The Examiner finds that Krishnamurthy determines a cost associated with serving a requested media file. Ans. 13. Appellants do not dispute this finding with particularity, but instead rely on the same arguments made in connection with claim 1. Br. 26. We are not persuaded by these arguments, however, for the reasons previously discussed.

We are therefore not persuaded that the Examiner erred in rejecting representative claim 4, and claim 9 which falls therewith.

Claim 5

We will also sustain the Examiner's rejection of claim 5. First, Appellants do not dispute the Examiner's reliance on Krishnamurthy for teaching determining a cost associated with serving the streaming media file as noted above with respect to claim 4. And while Appellants dispute the Examiner's reliance on Ueno and Krishnamurthy for teaching whether such a determination is based on the cost of serving the requested file from memory or disk (Br. 26-28), we see no error in the Examiner's position based on the scope and breadth of the limitation.

All that claim 5 requires is determining the cost of serving the requested file from memory *or* disk. Based on this alternative language, only one such cost need be determined to meet this limitation. That is, the

claim does not require separately analyzing and comparing both costs in this determination.

As the Examiner indicates (Ans. 24), Ueno serves at least part of the requested file from memory as suggested by at least the server's storage device. *See* FF 13, 15, 16. And since Krishnamurthy teaches determining a cost associated with various quality of service levels associated with network resources (FF 14), we see no reason why such cost-based factors could not have been utilized in Ueno's system as the Examiner proposes. Such an enhancement is tantamount to the predictable use of prior art elements according to their established functions—an obvious improvement. *See KSR*, 550 U.S. at 417.

We are therefore not persuaded that the Examiner erred in rejecting claim 5.

Claim 10

We will also sustain the Examiner's rejection of claim 10 essentially for the reasons indicated previously regarding claim 1. Although Appellants nominally argue claim 10 separately (Br. 29), Appellants merely reproduce the claim language and underline portions of the claim that are said to not be taught or suggested by the cited prior art.

Although these statements fall well short of rebutting the Examiner's obviousness conclusion, we note that Ueno's inability to accept new demands (i.e., requests) for service when these upper limits are reached (i.e., due to these simultaneous accesses and users) as we indicated with respect to

claim 1 at least suggests the recited rejection of new requests in claim 10. *See* FF 6.

We are therefore not persuaded that the Examiner erred in rejecting claim 10.

Claim 41

We will also sustain the Examiner's rejection of claim 41. As we indicated with respect to claim 1, Ueno's determines that the system is unable to accept new demands (i.e., requests) for service when these upper limits are reached (i.e., due to these simultaneous accesses and users). *See* FF 6. It follows that such a quality of service guarantee check would likewise be performed when the system determines that it can accept new requests since sufficient resources are available to service that request. *See id.*

We are therefore not persuaded that the Examiner erred in rejecting claim 41.

CONCLUSION

Under § 101, the Examiner did not err in rejecting claims 29-36.

Under § 102, the Examiner did not err in rejecting claims 1 and 6-8, but erred in rejecting claims 2, 23-25, 29-33, and 37-39.

Under § 103, the Examiner did not err in rejecting claims 4, 5, 9, and 10, but erred in rejecting claims 3, 11, 13-17, 19-22, 27, 28, 34-36, 40, and 42.

ORDER

The Examiner's decision rejecting claims 1-11, 13-17, and 19-42 is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

rwk

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins CO 80527-2400